

# Knightsville Neighborhood District Design Guidelines



UNION STUDIO  
ARCHITECTURE & COMMUNITY DESIGN

# Table of Contents

## Frontage Types

Core Frontage.....	2
Avenue Frontage.....	3
Street Frontage.....	4
Side Street Frontage.....	5
Path Frontage (w/ Primary Entrance).....	6
Path Frontage (w/o Primary Entrance).....	7

## Site Configuration and Site Elements

Retail Site.....	9
Retail Entry.....	10
Retail Parking.....	11
Retail Landscaping.....	13
Bicycle Parking.....	14
Outdoor Seating.....	15
Site Lighting.....	16
Fences and Masonry Walls.....	17
Residential Lot.....	18

## Mixed Use and Retail Elements

Building Scale.....	20
Scales of Use.....	21
Entries.....	22
Storefronts.....	23
Retail Doors.....	24
Retail Windows.....	25
Storefront Awnings.....	26
Retail Signage.....	27
Projecting Signage.....	28
Freestanding Signage.....	29
Window Signage.....	30
Storefront Lighting.....	31
Flat Roofs/Parapets.....	32

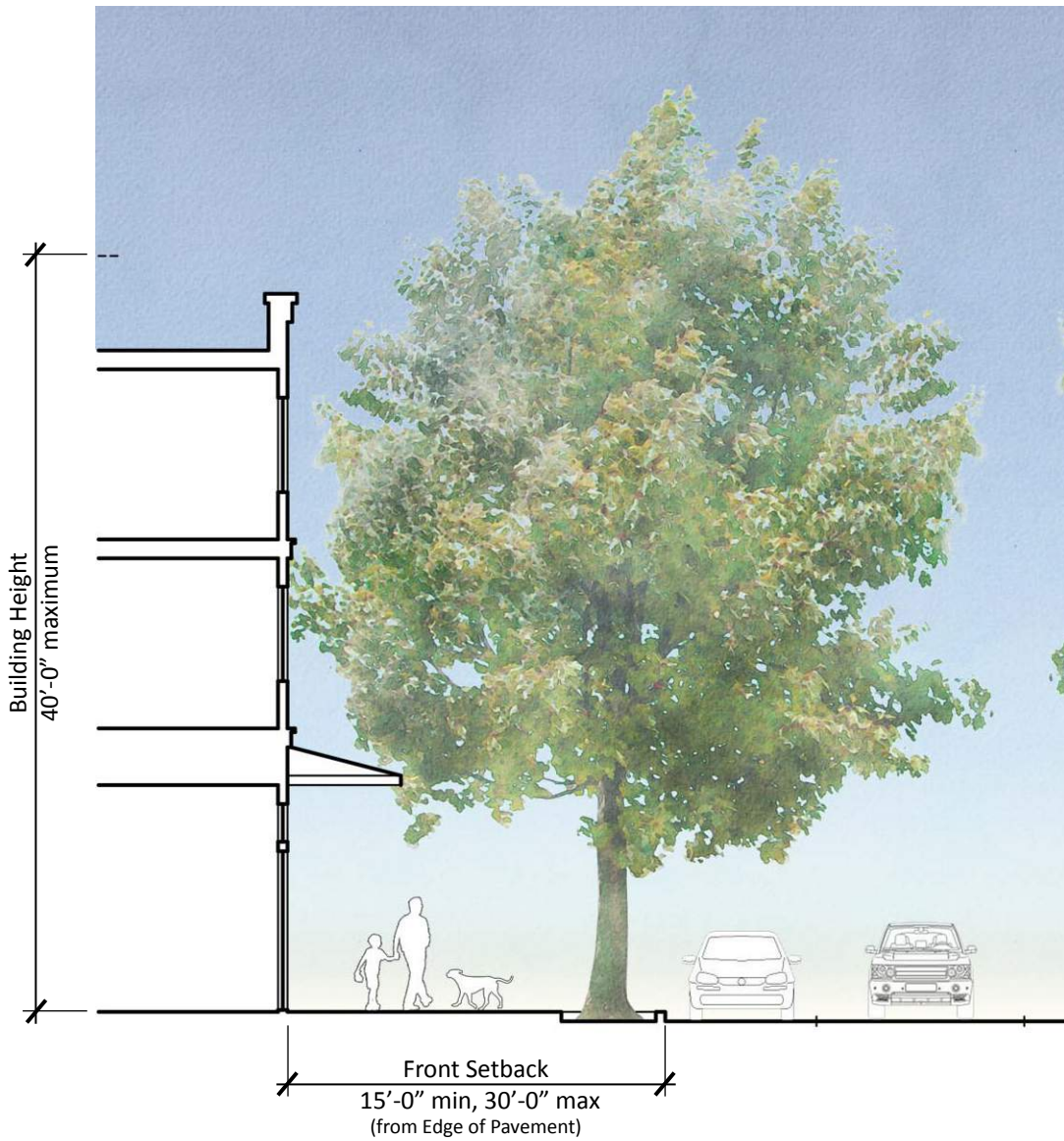
## Building Elements

Masonry and Stucco.....	34
Existing Masonry.....	35
Wood Siding.....	36
Roof Materials.....	37
Rooftop Equipment.....	38
Dormers.....	39
Dormer Details.....	40
Eaves.....	41
Cornices.....	42
Gutters & Downspouts.....	43
Gutters & Flashing.....	44
Residential Entry Doors.....	45
Garage Doors.....	46
Windows.....	47
Window Muntins.....	48
Casings.....	49
Shutters.....	50
Front Porches.....	51
Columns & Beams.....	52
Column Bases.....	53
Railings.....	54
Trim.....	55

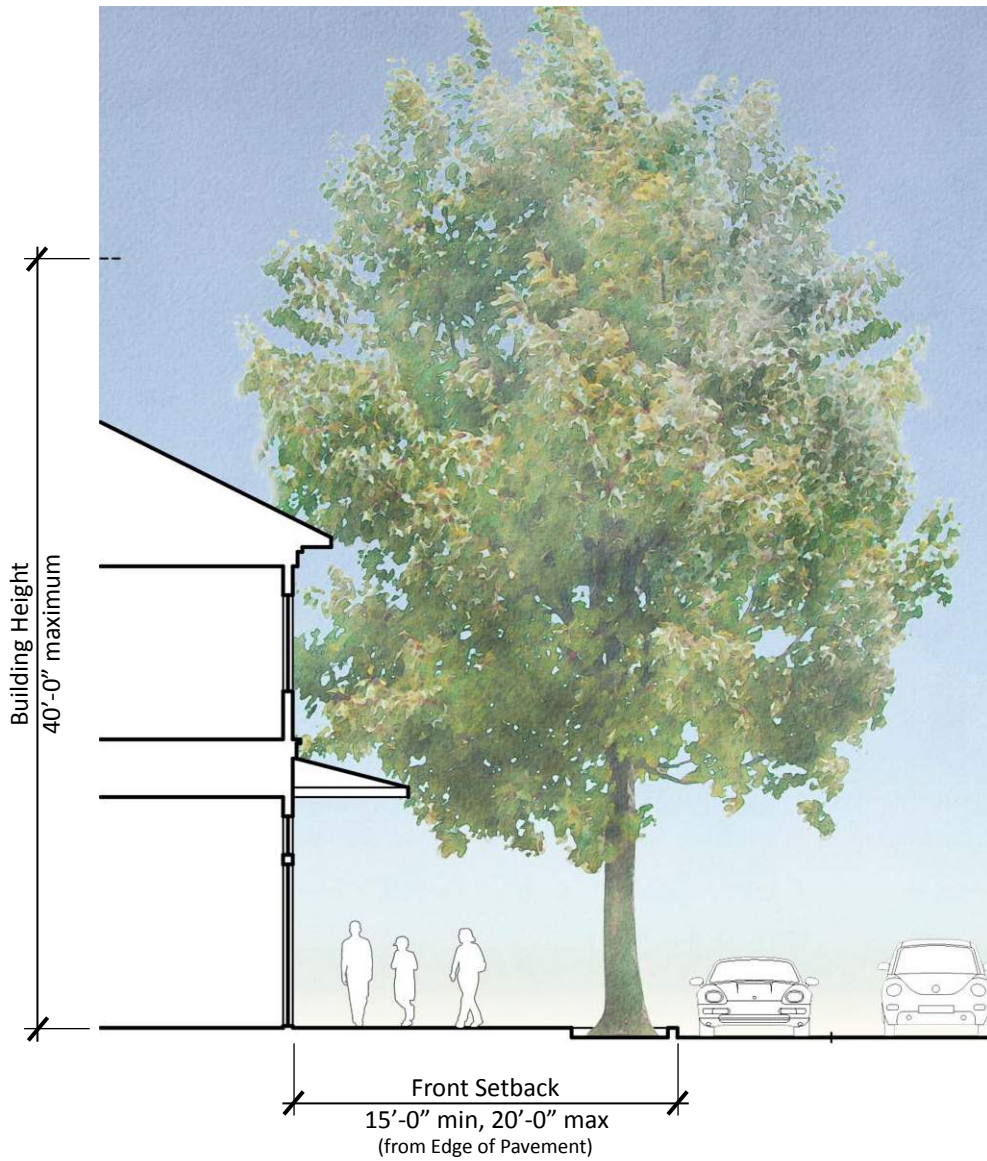
<b>Additional Resources.....</b>	<b>56</b>
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# Frontage Types

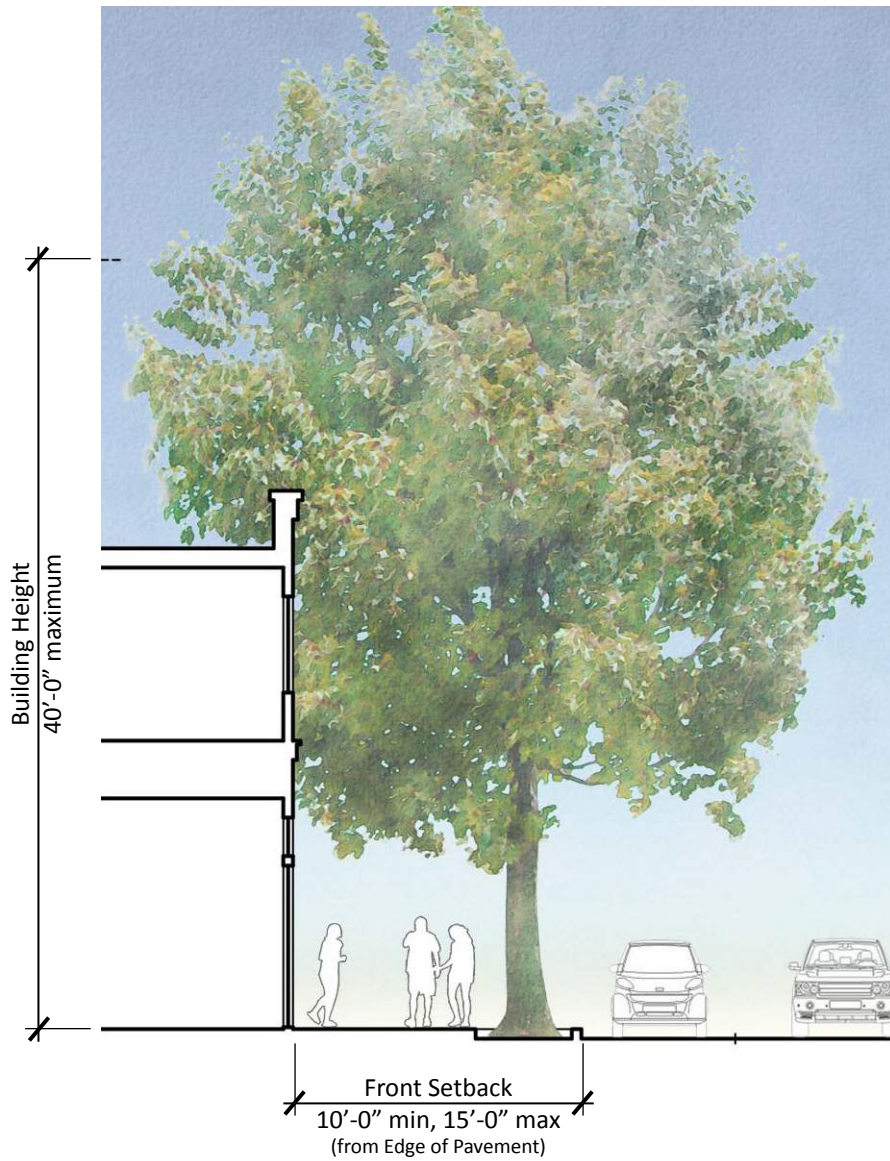
# Core Frontage



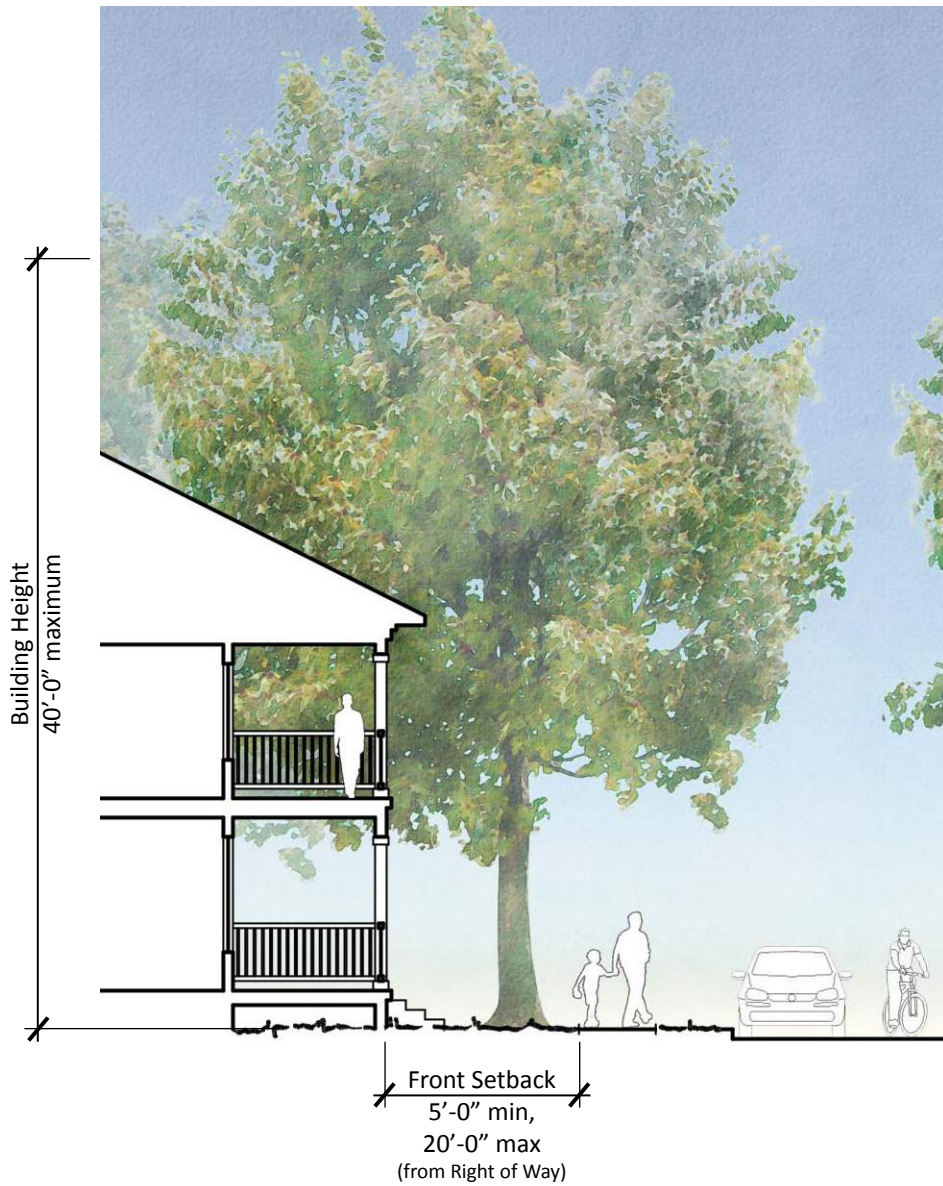
# Avenue Frontage



# Street Frontage



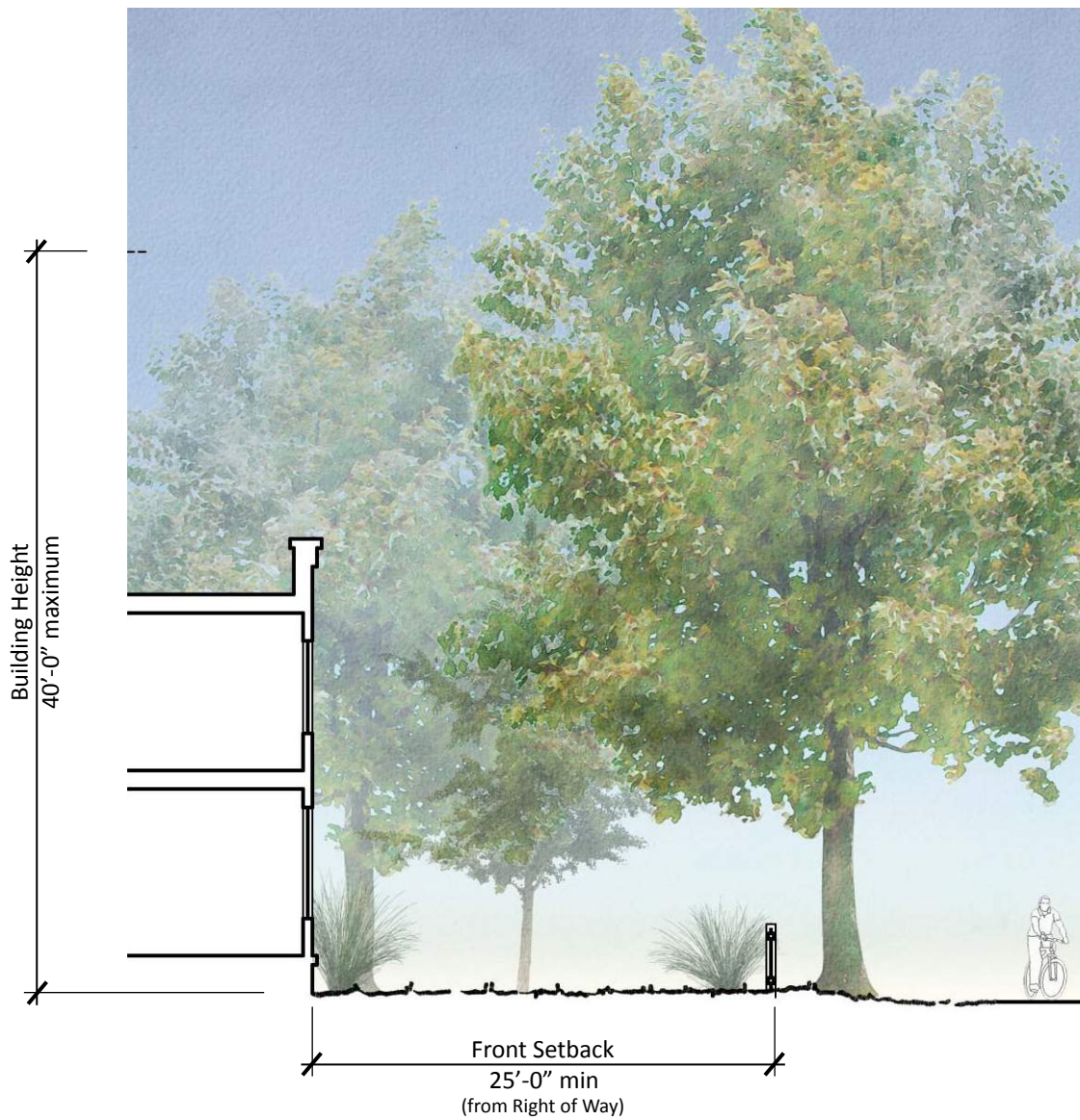
# Side Street Frontage



### Path Frontage (w/ Primary Entrance)



### Path Frontage (w/o Primary Entrance)



# Site Configuration and Site Elements



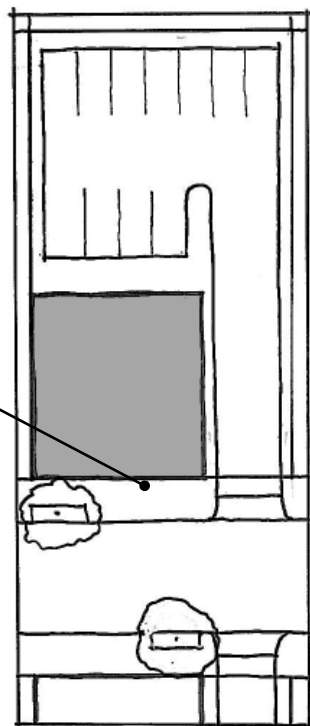
*A traditional retail building meets the sidewalk to engage pedestrians in window-shopping.*

### Retail Site

ON A TRADITIONAL RETAIL STREET STORES ENGAGE THE SIDEWALK.

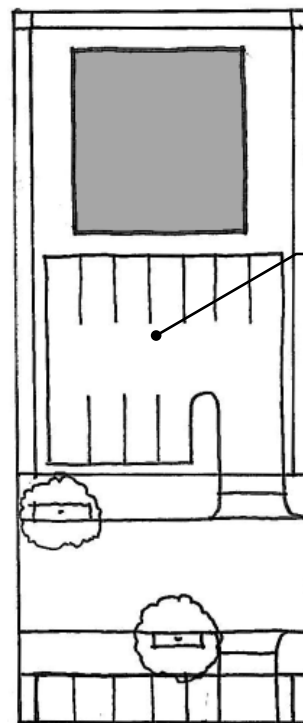
Retail buildings should engage the sidewalk and form a street wall that contributes to the character of the street by having little or no setback from the front property line.

#### DO



Storefronts shall have little or no setback

#### AVOID



Front setback area typically used for parking is unwelcoming to pedestrians.



*The front of the shops form a street wall that defines the street as a public room.*



*Retail buildings set back from the street discourage shoppers since even adjacent shops or those across the street are separated by expanses of cars and asphalt.*

## Retail Entry

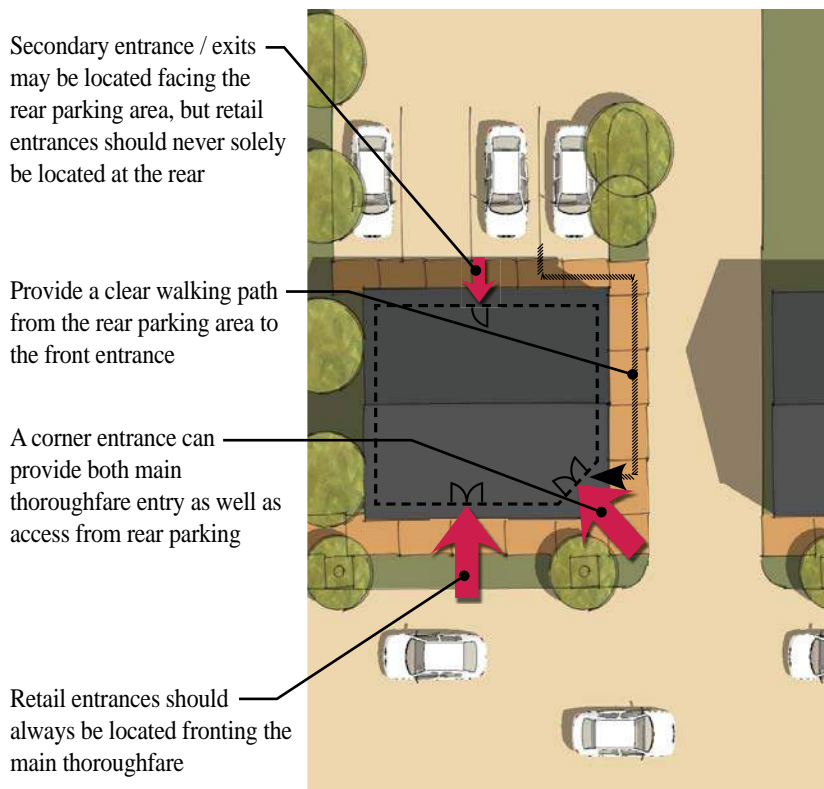
A TRADITIONAL SHOP IS ENTERED DIRECTLY FROM THE SIDEWALK.



*Traditional storefronts enter directly off the sidewalk.*

The entry to ground floor retail shall serve both pedestrians and off-street parking, where it exists on site. A corner entry may be used where it serves both pedestrians and a parking area to the side.

### DO



*Recommended entry location(s) on a retail site.*

### Key Points

- The entry to retail should be obvious and convenient.
- Retail entries should be located directly off the sidewalk. Gallerias and indoor malls are discouraged.



*An inset entry allows more display area and a protected place to view merchandise.*



*A corner entry serves customers arriving from two different directions.*

### AVOID



*Avoid locating the primary entry at the rear of a building, regardless of its proximity to a rear parking area.*

# Retail Parking

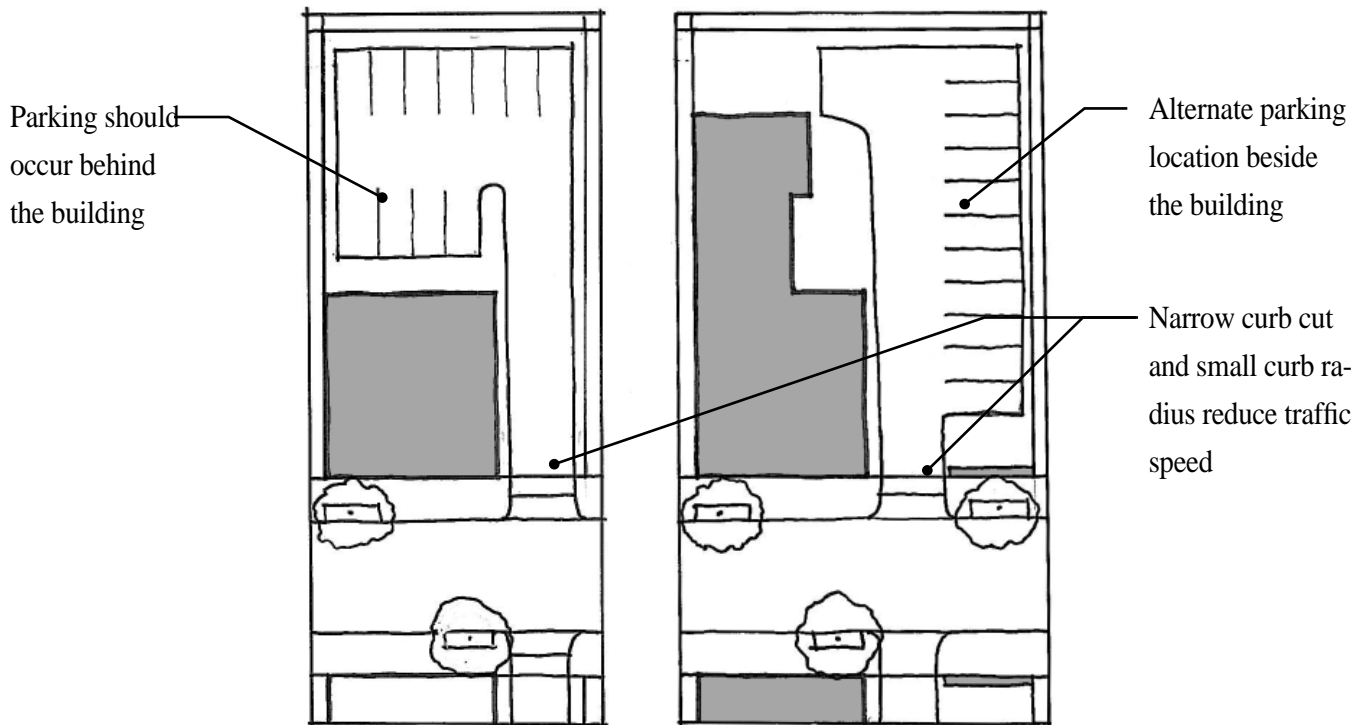
OFF-STREET PARKING HARMES TRADITIONAL RETAIL STREETS.



*The most successful retail streets offer a continuous line of shops with no drives or parking.*

Gaps between storefronts for parking or driveways disrupt the experience of retail streets. Off-Street parking shall be hidden to the greatest extent possible by buildings, fences, walls or landscaping.

## DO



*Off-street parking is least disruptive behind or beside the building.*

## AVOID



*Avoid parking lots in front of the building.*



*Wide entry and exit lanes, yield conditions and large curb radii allow traffic to enter or exit parking lots at dangerous speeds.*

# Retail Parking

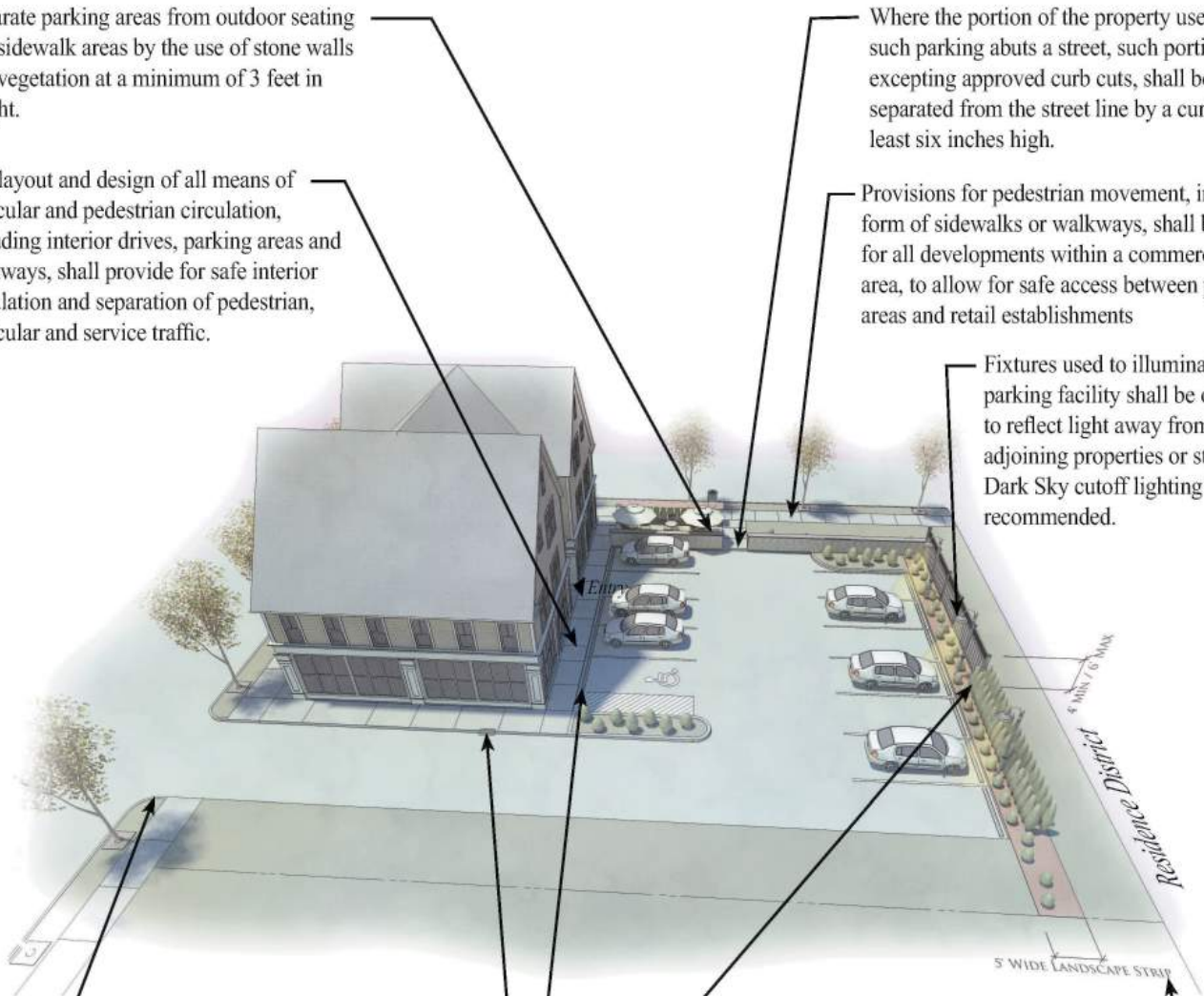
Separate parking areas from outdoor seating and sidewalk areas by the use of stone walls and vegetation at a minimum of 3 feet in height.

The layout and design of all means of vehicular and pedestrian circulation, including interior drives, parking areas and walkways, shall provide for safe interior circulation and separation of pedestrian, vehicular and service traffic.

Where the portion of the property used for such parking abuts a street, such portion, excepting approved curb cuts, shall be separated from the street line by a curb at least six inches high.

Provisions for pedestrian movement, in the form of sidewalks or walkways, shall be made for all developments within a commercial area, to allow for safe access between parking areas and retail establishments

Fixtures used to illuminate any parking facility shall be oriented to reflect light away from adjoining properties or streets. Dark Sky cutoff lighting fixtures recommended.



The number of site entrances should be the minimum necessary for effective traffic control, and sharing of access driveways and parking areas by adjoining properties should be considered where possible.

Such area shall have a dust-free hard surface, be provided with bumper barriers where needed and include facilities for managing stormwater runoff.

Use opaque fencing or a double-row of compact evergreens to screen the parking area from an adjoining residential district.

Where such a parking area lies within or adjoins a Residence District, there shall be provided a five-foot-wide landscaped strip containing an opaque fence not less than four feet in height nor more than six feet in height, or a double-row compact evergreen screen not less than four feet in height, which shall be maintained in a neat and attractive manner between the parking facility and the adjoining Residence District.

## Retail Landscaping

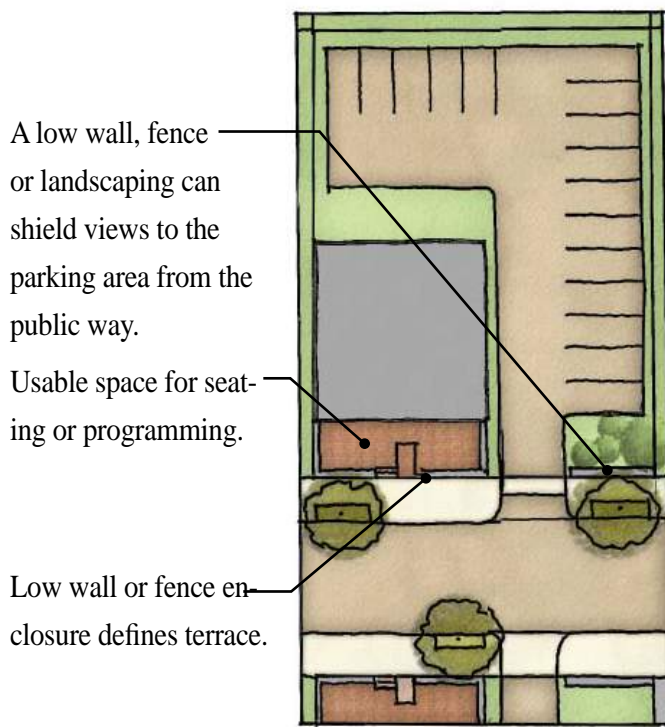
LANDSCAPING AT RETAIL BUILDINGS CONTRIBUTES TO THE PUBLIC REALM.



*Landscaping can make spaces more usable.*

Retail landscaping can be used to create usable spaces on the exterior of the building, such as plazas and terraces. On retail streets, landscaping can also continue a street edge interrupted by parking.

### DO



*The space within a retail setback must be designed and programmed to maintain the connection between the street and store.*

### Key Points

- A low wall or fence can define the area in front of a retail building so that it may be used for dining or other programming.
- If parking is located to the side of a retail building, a low wall or fence can shield the parking area from view from the public way.
- Hardscaping is essential to making outdoor space usable.
- Planting on retail streets should be limited to tree wells, planter boxes and pots. Planting beds may be used to soften parking areas at the side and rear of retail buildings.

### AVOID



*Undefined or unprogrammed spaces in front of set-back retail buildings become unusable zones or parking lots.*



*Residential foundation plantings force pedestrians away rather than inviting them to view wares.*



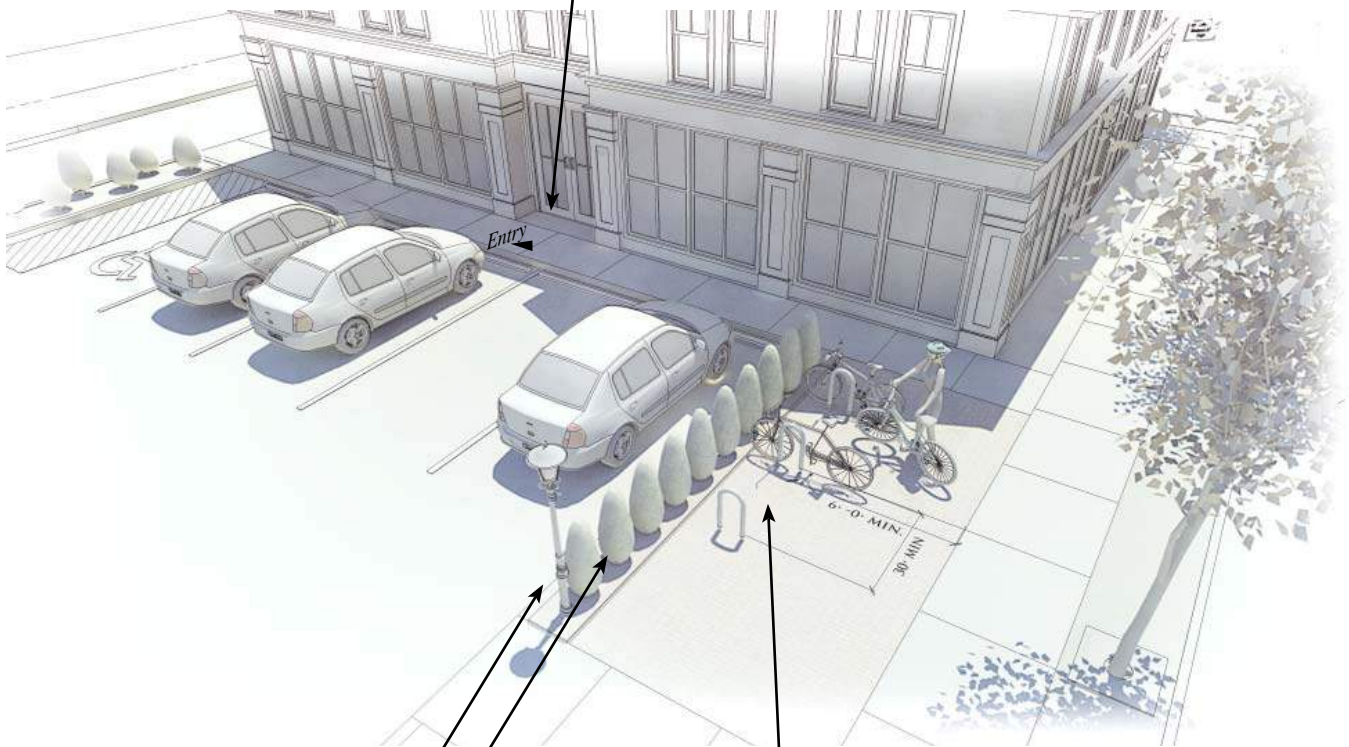
*Large expanses of parking exposed to the public way creates dead-zones that are unpleasant for pedestrians.*

# Bicycle Parking

**SAFE AND CONVENIENT PARKING CAN ENCOURAGE BICYCLE USE.**

Alternative modes of transportation should be encouraged in the neighborhood to alleviate traffic congestion and promote health and community. Bike racks can help encourage this.


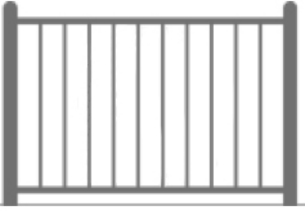
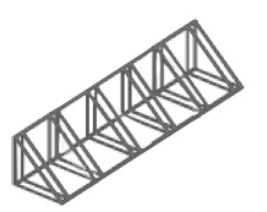
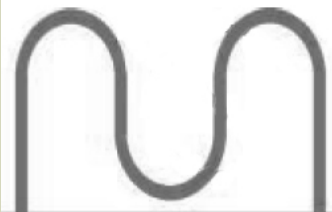
The bike parking area should be convenient to building entrances and street access, but away from normal pedestrian and auto traffic.



Bicycle parking areas should be well lit for safety and security.

Separate bicycle parking from auto parking and roadways.

Bicycle parking facilities should be provided wherever possible. A highly visible location discourages theft and vandalism. Also, locate bike racks as to not block the pedestrian path.

<p><b>DO</b></p>  <p><i>Inverted 'U'</i></p>	<p><b>AVOID</b></p>		
 <p><i>Comb</i></p>	 <p><i>Toast</i></p>	 <p><i>Wave</i></p>	

# Outdoor Seating

LANDSCAPED TERRACE AREAS CAN PROVIDE FOR OUTDOOR USES.

The outdoor seating area shall be screened from parking, sidewalks and/or street by a landscaping strip, plants or fencing at least four feet in height and not more than six feet in height. All such screening materials must be secured so as not to create a hazard.

Outdoor seating areas shall be distinguished from parking areas by solid, uninterrupted concrete or granite curbs and landscaping which physically separates the outdoor seating area from parking.



Outdoor seating or display shall not block handicapped or pedestrian access.

There shall be at least one readily visible litter barrel for every 12 seats.



*A mix of lighting types, including appropriate street lights, helps in establishing the character of a place.*

## Site Lighting

SITE LIGHTING IS A KEY COMPONENT TO THE MAKING OF A PLACE

Site lighting has a strong effect on the character of a place. This includes both the distribution of the light, and the character of the light fixture/pole itself.

### DO



*Street lights should be decorative in shape, scale and finish, with detailed, articulated treatments for the base, post, fixture and crown.*

### Key Features

- A variety of lighting types should be used to address the different needs of civic spaces, pedestrian oriented streets and parking areas.
- Lighting should be designed to provide a uniform distribution of light while also addressing safety needs.
- Lighting should be in keeping with the character of the spaces and buildings around them. Industrial poles and fixtures concerned purely with functional requirements should be avoided.

### AVOID



*Designing site lighting purely to meet functional requirements denies its ability to support character of place.*

## Fences and Masonry Walls

FENCES AND WALLS HELP HOLD AN EDGE WHERE BUILDINGS CAN NOT



*Fences and walls help identify distinguish public vs. private areas.*

Low stone walls and fences can mark the boundaries of a property to identify the edge of public and private space. They can also serve to help screen parking lots or define open spaces.

### DO



*Dressed masonry walls, wrought iron and decorative wood fences are appropriate in formal settings and can help define boundaries like parking edges.*



*Pickets typical in residential areas.*



*An inset gate invites entry.*

### Key Points

- Fences and walls can be used in combination with landscaping to help define exposed parking lots.
- Fences provide a necessary separation between the public realm and private property.
- Construct fences of paintable materials such as wood, fiberglass or wrought iron. Walls may be brick or stone masonry.
- The design of fences should be appropriate in scale and style to the building, site and surrounding properties.

### AVOID



*PVC, plastic and other synthetic fences have been shown to lower property values in historic neighborhoods.*



*Chain-link fencing should be confined to the least visible locations.*

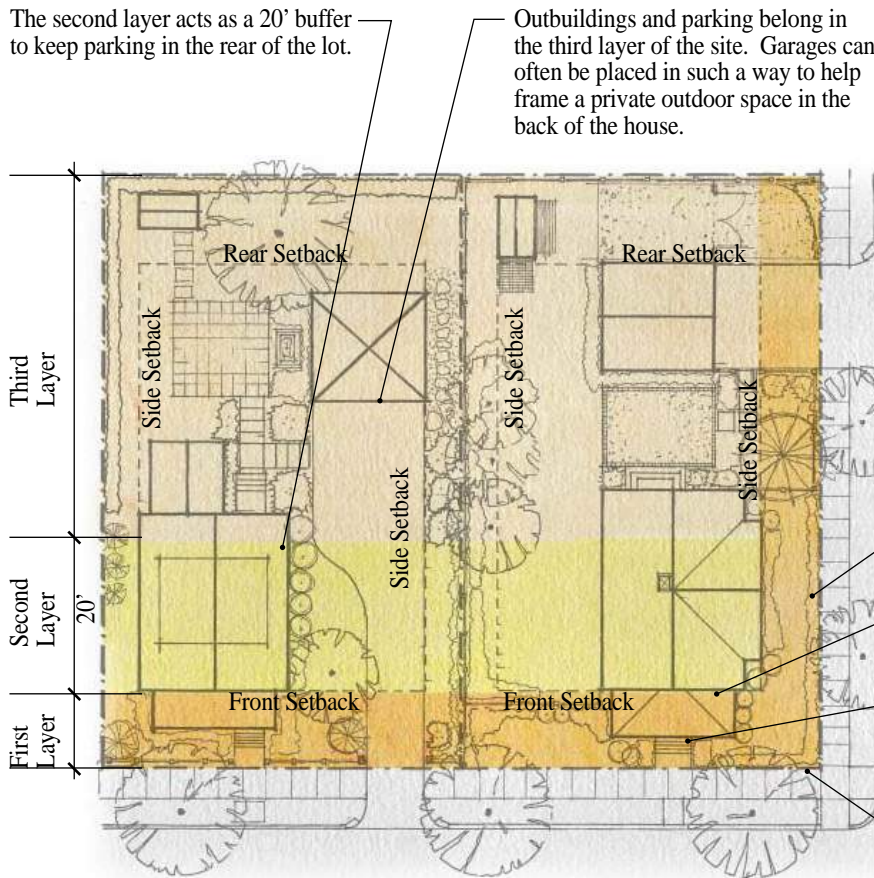


*Tall stockade type fences are typically not found in a historic neighborhood setting.*

# Residential Lot

A TRADITIONAL HOME SITE IS LAYERED FROM THE PUBLIC TO PRIVATE.

How a home is placed on its lot can help or hurt the character of the neighborhood. Use these guidelines to help determine the traditional pattern found in historic neighborhoods.



- Corner lots should be well defined on both sides with building frontage, fencing and landscaping.
- The building should address the street. It should respect existing and/or regulating front setbacks.
- The building entry should be located in the first layer such that it is clearly visible from the street. Porches and stoops can help to create a transition zone between the outside and inside worlds.
- Landscaping and fencing can help to define the private frontage.

The three layers signify the proper zones for the location of the entry, the building, parking and any outbuildings.

## DO

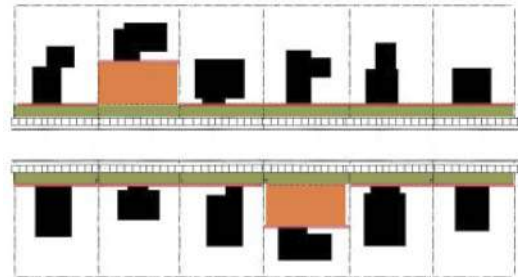


Trees create a separation between the public zone of the sidewalk and the private zone of the front porch.



A successful corner lot creates a strong frontage along both the primary and secondary streets. Landscaping elements soften the hard edges of the building along the front and side.

## AVOID



It is important to maintain the rhythm of the street when building on new lots in traditional neighborhoods. Houses that are set too far back and do not align with the other houses on the street disrupt the continuity of the neighborhood.

# Mixed Use and Retail Elements



*A large building can be designed to fit with the scale of a historic main street.*

## Building Scale

DESIGN BUILDINGS TO BREAK UP MASS AND REDUCE SCALE

Traditionally, main streets were comprised of a series of smaller buildings built over time. New structures should attempt to reflect a similar scale and massing.



- Shed dormer provides opportunity for additional windows and increased head height on the top floor.
- Top floor units contained in roof mass
- Keeping eave below third floor level reduces the scale of the building
- Spaces created between the various buildings provide opportunities for pedestrian plazas, courtyards and other outdoor gathering areas.

### Key Points

- While allowable building heights will vary by locale, most historic main streets were 2-3 stories in height.
- Smaller buildings with useful spaces between are preferred over long continuous street facades



*A complex of smaller scale buildings is preferable to a single large structure because the varied massing provides visual interest and human scale.*

### DO



*Mixed use buildings should share the same architectural character and scale as the surrounding neighborhood.*

### AVOID



*Monotonous elevations that provide little character or visual interest.*

### Scales of Use

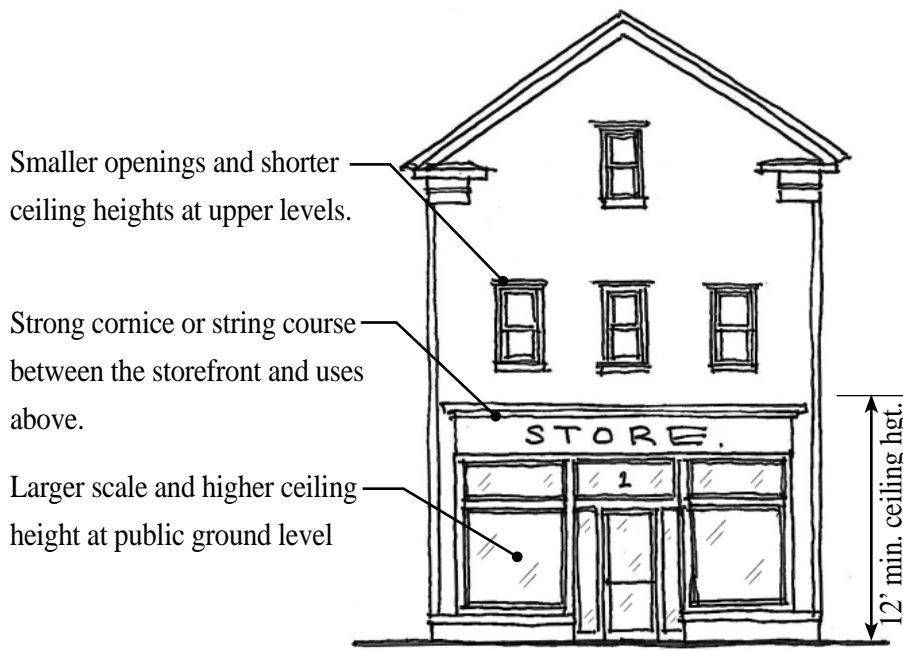
MIXED-USE BUILDINGS  
CHANGE SCALE AND  
CHARACTER WITH USES.



A change in scale distinguishes the change between uses.

Mixed-use buildings are traditionally designed with the scale and features appropriate to each use. The transition between the lower and upper floors is important to the design of the building as a whole.

#### DO



#### Key Points

- Ground level retail should have a minimum ceiling height of 12', 16' preferred. The taller space and larger scale of the storefront is appropriate to the retail use.
- Shorter ceiling heights and smaller scale openings are appropriate on upper stories used for office or residential.
- A strong cornice or string course separates the scale of the storefront and residential openings above.

The different scales of multiple uses can lend itself to a balanced composition.

#### AVOID



Poorly proportioned buildings result when either of the mixed-use functions are not of the appropriate scale.



*Separate retail and residential entries express their individual purposes.*

## Entries

SEPARATE ENTRIES EXPRESS THE RETAIL AND RESIDENTIAL USES.

Public entries for commercial and retail uses are defined by a large scale and glazing. Private entries for residential uses are smaller in scale, according to their use.

### DO

Awnings and canopies are encouraged. See “Storefront Awnings”.

Large scale and maximum glazing defines the public entry

The residential entry should be that of a smaller scale, befitting its role as a private entrance



*A large storefront entrance welcomes the public while a smaller residential entry is private for residents and their guests.*

### Key Points

- Entries to retail and commercial uses should be prominent and large in scale to be clearly identifiable to the public. See “Retail Doors”
- Awnings and canopies over storefront entries are encouraged.
- Residential entries should be separate from public entries. The location may be less prominent and the scale smaller than for retail.
- Residential entries should have their own address separate from the retail.

### AVOID



*Public entries that are poorly defined or difficult to locate.*



*Residential entries that are not expressed with dignity. Residential entries that lack an individual address.*

## Storefronts

GROUND-LEVEL RETAIL  
DRAWS SHOPPERS AND  
ENLIVENS THE SIDEWALK.

Large displays on a storefront can entice passers-by and invite them into a store. Visibility is important to make potential customers aware of a store's offering and create a sense of welcome.

Glazing area is approximately 70% of ground floor elevation



### DO

Sign Band

Optional transoms

Clear glazing area is approx. 70% of ground floor elevation

Optional signage on glass - to be legible from across the street



Sign lights with full cut-off to minimize light pollution

Clear-glazed door fronting on the sidewalk

Durable material, such as stone, to meet the ground



*Transparency of a storefront invites customers by letting them know what is offered and if the shop is welcoming business.*



### Key Points

- Storefronts should contain approximately 70% clear glazed area for the display of goods and services.
- Displays should allow a view through to the sales floor for customers to easily see whether the shop is open.

### AVOID



*Opaque façades do not invite commercial activity.*



*The blank walls and windows are uninteresting and shoppers may pass on by.*



*Storefront doors allows views into and out of the shop to invite passers-by into an establishment.*

## Retail Doors

CLEAR-GLAZED DOORS ALLOW VIEWS AND INVITE CUSTOMERS.

Retail doors are traditionally clear-glazed so that the door is not a visual barrier to the store. The transparency allows views into the store, which is inviting and welcoming for shoppers.

### DO



Retail doors should have clear glass and enter directly from the street.



*Clear glazed doors allow views and invite shoppers to feel welcome and safe.*



### Key Points

- Retail doors should enter at street level directly off the sidewalk. Where parking is on the side of a store, a corner entry may serve both pedestrian and vehicular traffic.
- Doors should be clear glazed to allow views into and out of the store. This visibility is inviting, provides security and prevents collisions.

### AVOID



*Solid doors obstruct views - customers may be reluctant to enter.*



*Screen doors appear residential - to enter would be an intrusion.*

## Retail Windows

STOREFRONTS ARE COMPOSED WITH VERTICAL PROPORTIONS.

Retail storefronts were traditionally composed of small panes combined with muntins and mullins into larger windows. The panes were oriented vertically for strength and to reduce structural spans.



Traditional storefronts are architectural compositions designed to frame services and merchandise.

### DO



Vertical window proportions allow a traditional structural system with short spans and vertical piers to carry imposed loads to the ground.

### AVOID



Horizontal window bands rely on hidden structural beams to span the long openings. These arrangements lack visual support for the stories above.

### Key Points

- Each window pane and opening should have a square or vertical proportion
- Square or vertical window elements may be further sub-divided into vertical panes.
- Storefront windows should follow the design guidelines for windows and muntins. See "Windows"



Canvas awnings can increase comfort by shielding unwanted sun or rain.

## Storefront Awnings

AWNINGS PROTECT WINDOW SHOPPERS FROM SUN AND RAIN.

Storefront awnings provide some control of weather influences at the entrance to a store. Offering shelter from the rain or sun can attract pedestrians to window shop or eliminate unwanted glare.

### DO



### Key Points

- Canvas awnings on retractable metal frames provide the greatest control over sunlight and rain.
- Store signage should be located on the fringe of the awning.
- Sloped awnings are preferred over rounded styles.

Retractable metal frame

Canvas awning

Signage on fringe



Retractable canvas awnings can be retracted or spread depending on the weather.

### AVOID



Metal or other non-traditional materials.



Barrel-shaped or rounded awnings.

## Retail Signage

SIGNAGE IS A SIGNATURE AND INVITATION FROM THE SHOP.

Retail signage is an important component to the storefront composition and the streetscape. Appropriate signage provides advertising for a business and information to potential customers.



Beautiful signage is critical for the success of a business and a streetscape.

### DO

Sign band with attached, painted or engraved lettering

Blade signs with attached, painted or engraved lettering

Lettering printed on awning fringe

Window lettering painted or applied vinyl



Pedestrian-scaled signs of quality materials can provide the required marketing and contribute to the character of the building.

### AVOID



Large marquis, oversized signs and signs above the first story are distracting and oriented to fast-moving traffic.

### Key Points

- Retail signage may include a sign band, blade sign, awning lettering and window lettering.
- Signage should be scaled and oriented to the pedestrian. Generally, all signage should occur below the second floor.
- Sign materials should reflect the character of the building. Wood and metal signs are encouraged. Avoid using plastic, vinyl and other synthetic materials that are not traditional in character.

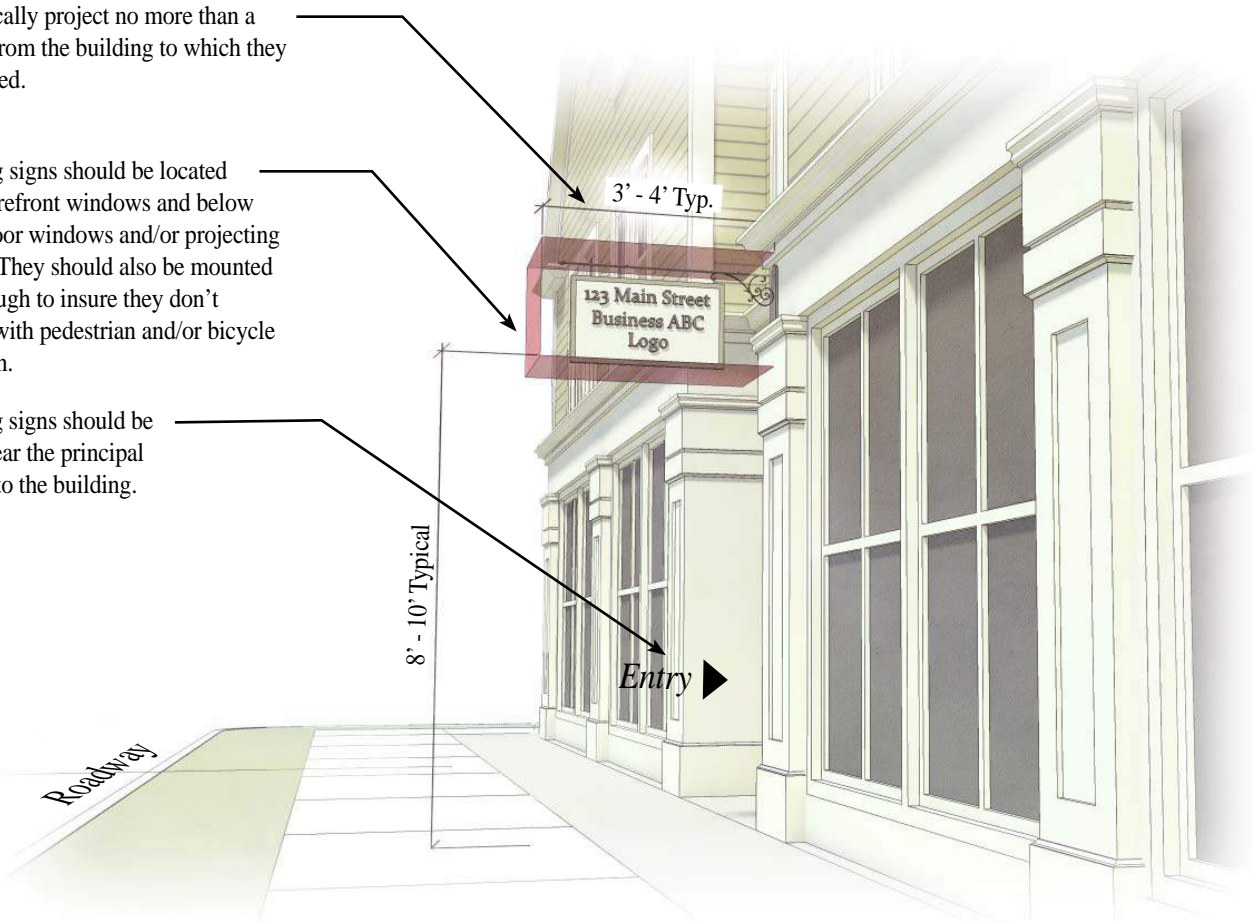
# Retail Signage

## PROJECTING SIGNAGE

Sign typically project no more than a few feet from the building to which they are attached.

Projecting signs should be located above storefront windows and below second floor windows and/or projecting cornices. They should also be mounted high enough to insure they don't interfere with pedestrian and/or bicycle circulation.

Projecting signs should be located near the principal doorway to the building.



### Key Points

- Projecting signs shall not overhang into any roadway or create a hazard to pedestrians or cyclists.
- Content is typically kept to a minimum, including only information like the business name, address and/or logo.
- Sign materials shall be of a high quality and compatible with the design of the building and facade to which they are attached.
- Lighting of signage should be carefully considered (See "Storefront Lighting"), and internally illuminated plastic or fiberglass signs aren't appropriate.

### AVOID



*Projecting signs located at building corners where they do not meet perpendicular to the building facade.*



## Retail Signage

### WINDOW SIGNAGE

Whenever possible, window signage should be located on the window adjacent to the primary business entrance.

Permanent window signs indicating the name and/or logo of the business, the nature of the business, the hours and days of business, the credit cards honored and/or other information related to the business establishment or activity may be painted on or affixed to the inside of one window of the business. Such information should not cover more than 25% of the total window area located on the front of the building.





Storefront lighting can be integrated with the design and character of the storefront and signage.

## Storefront Lighting

LIGHTING PROVIDES SAFETY AND EXTENDS HOURS AFTER DARK.

Retail lighting is essential for creating safe and welcoming streets so that retail stores can extend operating hours after sunset. Retail lighting can add a dramatic effect to signage after dark.

### DO

Wall mounted and goose-neck fixtures are appropriate for lighting sign bands

Blade signs may have directional pendant lighting

A ceiling mounted fixture may illuminate recessed entries



Gooseneck and pendant lighting can be directed to illuminate signage at night for advertising, way finding and safety.

### Key Points

- Retail lighting should be directed towards the merchandise, signage and pedestrian way.
- Directional lighting and cut-offs should be employed to reduce light pollution escaping into the night sky.
- Gooseneck, sconce and pendant lighting styles may be appropriate. Avoid neon lights and back lighting.

### AVOID



Neon and back-lit signs create undesirable glare and light pollution. Signs with electronic displays are distracting and are also discouraged.



*Flat roofs with parapets are common on main streets.*

## Flat Roofs/ Parapets

PARAPETS CELEBRATE THE MEETING BETWEEN BUILDING AND SKY.

Flat roofs with parapets are a common feature of most historic main streets. The decorative cornice found on such parapets is an important element in defining their character and scale.

### DO



*Parapets give expression to the top of a building, articulated and detailed in keeping with the rest of the facade.*



*Whether simple or ornate, the cornice should be proportional to the overall building composition.*

### Key Features

- Flat or low slope roofs with a parapet are a common building form found on most historic main streets.
- Such buildings include decorative parapets that give expression to the top of the building as it meets the sky.
- The cornice should be proportional to the overall facade and articulated in a manner consistent with the rhythm of the facade below.
- At exposed edges, parapet walls should return along secondary elevation enough to provide visual stability.

### AVOID



*Unadorned parapets leave the facade feeling flat and unresolved.*



*Parapet does not return on side elevation, appearing visually unstable.*

# Building Elements

## Masonry and Stucco

MASONRY IS OFTEN USED WHERE STRENGTH AND DURABILITY IS REQUIRED.



*Masonry walls express strength and permanence.*

Masonry walls are naturally strong and durable as well as resistant to fire and water. Brick and stone masonry are used in traditional buildings where these properties are valued, such as foundations. Quality masonry work is also aesthetically beautiful and employed in important buildings to make a statement of wealth.

### DO



*Fieldstone is a common material for buildings and garden walls.*

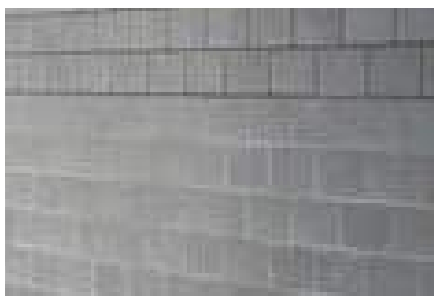


*Brick is primarily found in foundations and mill buildings.*

### Key Points

- New masonry work shall match the type, size, color and texture of masonry used in the historic surroundings.
- Bricks are recommended to be molded for the most historic appearance. Wire-cut bricks are a more recent innovation and non-traditional in appearance.
- Mortar should be colored to aged appearance.
- Mortar joints are recommended to be concave or weather struck to shed water properly away from the joint.
- Brick mortar joints should be no more than 3/8" wide. Joints in fieldstone may vary, but smaller joints typically show superior mason work that is integral to the character and pride of the work of traditional craftsmen.
- New masonry or stucco may be painted.
- CMU or poured concrete should be finished with stucco, plaster or similar material.

### AVOID



*Exposed CMU block or poured concrete walls. Concrete is not a traditional material.*



*Wire-cut brick is a more recent innovation and the texture is not found in traditional construction.*



*Existing masonry with historic materials and craftsmanship.*

## Existing Masonry

BRICK AND STONE REQUIRE MAINTENANCE FOR A LONG LIFE.

Masonry walls are naturally strong and durable. Brick and stone masonry is used in buildings where durability is valued, such as in the mills and foundations.

### DO



*A brick wall from an abandoned mill building remains standing as a testament to its strength and durability.*

### Key Points

- Masonry should be maintained and repaired to protect the existing materials and character.
- The type, color and aggregate of the new mortar should match the existing.
- The width and profile of new joints should match the existing.
- New bricks or masonry units shall match the size, color and texture of the existing.

### AVOID



*Sealant applied to existing brick or stone will discolor the masonry.*



*Cement mortar is incompatible and may cause historic brick to erode.*



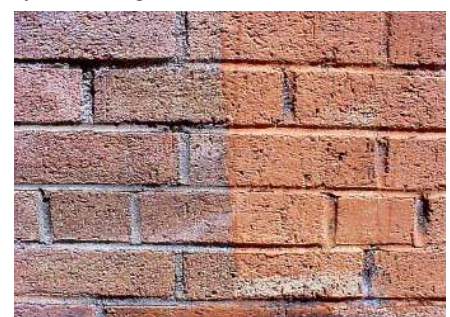
*Avoid widening joints in the process of removing old mortar.*



*Sloppy re-pointing may leave excessive mortar on the face of the brick.*



*Sandblasting is harsh and can erode the brick and mortar.*



*Painting an unpainted masonry wall changes the character of the building.*

# Wood Siding

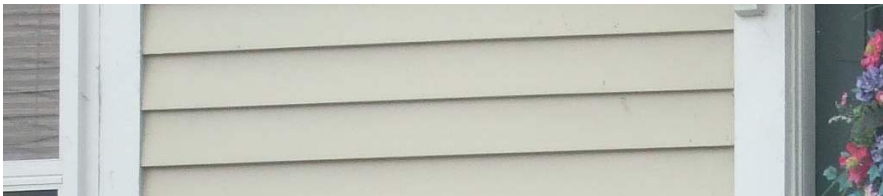
WOOD CLAPS, BOARDS OR SHINGLES ENCLOSE WOOD-FRAMED STRUCTURES



*Wood siding is a lightweight skin for wood-framed buildings.*

Wood siding can include the use of clapboard, board and batten, and cedar shingle sidings. Wood siding is traditionally used on wood-framed buildings. Siding can be nailed to the sheathing or framing to provide a lightweight exterior skin that keeps out the elements and provides an exterior finish.

## DO



*Wood clapboards on historic homes are smooth sawn with small exposure. The overlap and reveal help to shed water from the exterior wall.*



*Traditional cedar shingles are arranged in horizontal courses with the bottom edges aligned. Shingles may be painted or left to weather naturally.*



*Traditional board and batten employs wide boards of a single or varied widths laid vertically with narrow batten strips to cover the joints.*

## Key Points

- Clapboard siding should be wood or cementitious boards with smooth finish. Faux grain finishes are not appropriate representations of historic wood claps, which were traditionally smooth sawn. Vinyl and aluminum siding should not be used.
- Clapboard siding should be oriented horizontally, and have a 6" max. exposure.
- Shingles shall be white or natural cedar. Cementitious, aluminum and vinyl shingles do not accurately represent historic shingle siding.
- Shingles or clapboards may be painted or stained. Cedar siding may also be left to weather naturally.
- Shingles are recommended to be machine cut with bottom edges aligned. Split shakes are typically found only on roofs, never on walls.

## AVOID



*Faux wood grains on synthetic products add a texture that is not found in traditional wood clapboards.*



*Jagged edges caused by alternating shingle exposures. Traditional shingle siding is aligned in horizontal courses.*



*Traditional roofing is easy to install and repair.*

## Roof Materials

TRADITIONAL ROOFS  
NATURALLY PROTECT A HOME  
FROM MOISTURE.

Roofs were traditionally finished with cedar shingles or sheet metal. Asphalt shingles developed at the turn of the 20th century quickly replaced original roofing materials and have become traditional in their own right.

### DO



*Most neighborhoods feature a range of roofing materials, including both 3-tab and architectural asphalt shingles in a range of colors.*

#### Key Points

- Asphalt shingles may be architectural or 3-tab styles. Avoid shingles intended to look like another material.
- Low-pitched roofs should use metal roofing, either 5-V or standing seam. Membrane roofing should only be used on flat roofs where not visible.
- A range of gray and tan shades varying from light to dark are appropriate for the neighborhood. Bright reds, greens and blues are less common in historic areas.



*Split cedar shakes are appropriate roofing materials.*



*Metal roofing is common on low pitches over porticoes, porches and bays.*

### AVOID



*Rubber membrane roofing is limited to low pitches where not visible from the street.*



*Avoid asphalt shingles designed to imitate shakes, slate or other materials. These products are poor representations of the traditional materials.*



*Avoid clay tile and other roofing types not found in the area. Avoid red, green and other colors not typical on traditional buildings.*

## Rooftop Equipment

SKYLIGHTS, VENTS, ANTENNA AND SATELLITE DISHES ARE NOT TRADITIONAL FEATURES.



*Skylights are an unobtrusive way to let in daylight.*

Modern equipment can detract from the character of a place. These elements should be incorporated into a building with care so that they are minimally invasive. Choosing rooftop elements to blend with the roofing color, styles with small projection or locating equipment where hidden from view can mitigate the disturbance.

### DO



*Traditional buildings have no skylights or equipment visible on the roof from the public way, improving the buildings curb appeal.*

#### Key Points

- New skylights may be installed where minimally visible, as on the rear side of the building.
- Skylights should have a flat profile. Avoid bubble Plexiglas and other protruding profiles.
- The color of skylights and equipment should to blend with the roofing color.
- Place fixtures on the rear side of the roof or away from views from public ways.

### AVOID



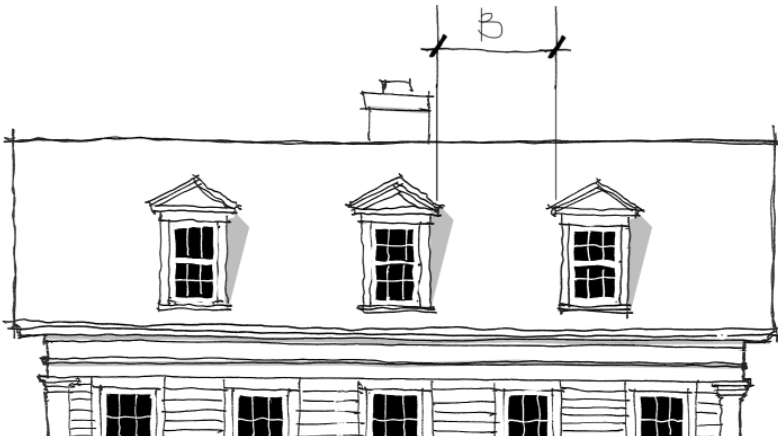
*Skylights with a high profile or strong color contrast with the roof stand out.*



*Skylights and equipment on the front facade or visible from the public way change the character of a building.*

## Dormers

**DORMERS CREATE USABLE SPACE WITH NATURAL LIGHT UNDER THE ROOF.**



*Dormers are arranged to create a balanced composition.*

Dormers are windows added to a pitched roof to provide fresh air and natural light to spaces under the rafters. Dormers are integral to the building composition and must be designed using principles that apply to the whole building.

### DO



*Dormer placement is based on the window pattern below, but does not repeat it. The distance between eaves is at least twice the width of the window.*

*A smaller window is required for the dormer to look proportional to the main windows.*

### Key Points

- Space dormers comfortably on the roof in relation to the pattern of windows on the body of the house.
- Scale the dormer windows down befitting their lesser role and accounting for the added mass of the dormer. Together, the dormer window and roof should have an equal “visual height” as the main windows.
- Scale the dormer eave and overhang detail up or down as required to approximate the proportion of the main eave in relation to the overall roof.
- Dormers are preferred over skylights for providing natural light to the top floor.

### AVOID



*Avoid spacing dormers too closely with uncomfortably tight clearance at the eaves.*

*Avoid using the same size window in the dormer as in the body of the house. The visual weight of the window and its dormer will create a top-heavy feel.*

### Dormer Details

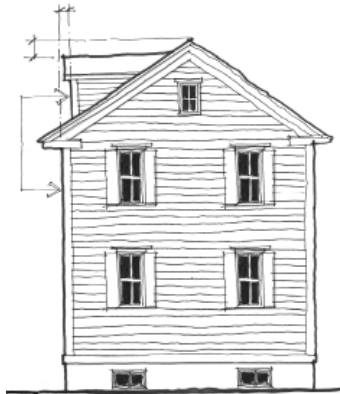
THE DETAILING OF DORMERS IS APPROPRIATE TO THE DORMER SCALE.

Dormers are traditionally detailed as secondary masses added to the main roof form. Good examples of dormers utilize trim appropriate to the smaller scale without replicating the main eave.



*Each dormer is a balanced composition in itself.*

#### DO



*Scale the dormer so that only casing and corner boards are required.*

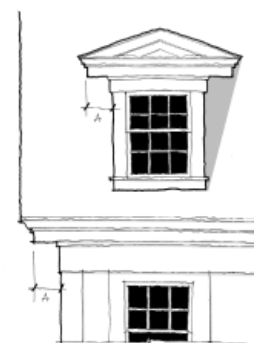
*Scale the dormer eave to fit proportionally with the size of the dormer.*

*Step the dormer back from the façade of the house so that they are in different planes.*

#### Key Points

- Detail the dormer such that the window casing or corner board receives the side walls.
- Set the dormer within the field of the roof. Locate the dormer back from the face of the main house such that the sill rides just above the roof with just enough below for flashing.
- The ridge of the dormer should fall below the ridge of the main roof so that it appears subservient to the more important main roof.

#### AVOID



*Avoid using the same eave detail for the house and dormer. The main eave is scaled to the house and is disproportionate for the dormer.*

## Eaves

ROOFS TRADITIONALLY OVERHANG TO SHED WATER FROM THE WALLS.

Eaves express the transition between a pitched roof and wall. Traditionally, the eave overhang was used to shed water away from the exterior wall of the building. This overhang is not required at the gable end.



*Appropriate eave return at a gable end.*

### DO



*Gable end return on a tight rake condition.*



*An eave with exposed rafter tails or sloping soffit needs no return.*



*A continuous cornice at the gable end eliminates the gable return condition.*



*Gable end with minimal eave and rake detailing.*

### Key Points

- Eaves in the historic areas are either open or boxed.
- Where the eave requires a return at a gable end, the eave should be continuous at the corner and centered over the corner board. The flashing on the top surface shall not be visible and no greater than 1:12 pitch.
- A continuous cornice at the gable end requires no return detail, but the top surface should be no greater than 1:12 pitch so that it is not visible from the street.

### AVOID



*The ubiquitous “pork-chop” eave return applies a triangular box at the intersection of the eave and rake.*



*This historic eave return was later enclosed with flat trim.*



*The pitch at the return significantly exceeds 1:12 – probably more like 12:12 in this case.*

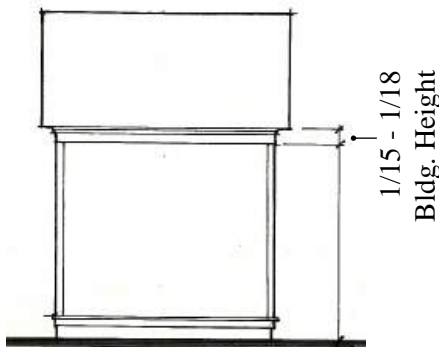
## Cornices

REFINED EAVES MAY BE RENDERED AS A CORNICE CAPPING THE BUILDING.



Buildings exhibiting a more ornate character may feature a cornice at the eave and rake. A cornice is the upper part of a classical entablature. In a wood framed building, the wall itself sometimes replaces the architrave (the lower portion of the entablature). The cornice is often created by adding mill work to a boxed soffit.

### DO



*Traditionally, the entablature assembly (composed of the cornice and associated trim) is between 1/15 and 1/18 of the building's total height.*

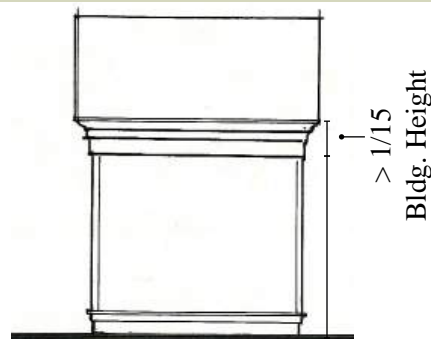


*Cornices should adjust in scale relative to the scale of the building or wing.*

### Key Points

- Cornices should be scaled relative to the size of the structure. In general, the entablature dimension should be between 1/15 and 1/18 of the building height (from eave to grade)
- Where single story additions or wings are present on a home the cornice should adjust in scale to match the scale of the secondary volume.

### AVOID

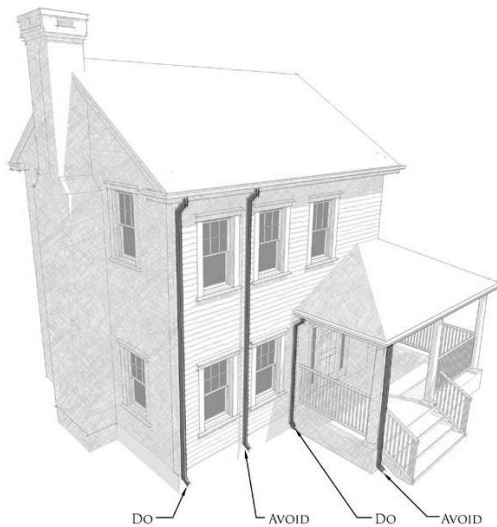


*When the entablature is greater than 1/15 of the building height, it can make the structure appear top heavy.*

## Gutters & Downspouts

GUTTERS AND DOWNSPOUTS CAN PROTECT A BUILDING.

Gutter and downspout systems are a traditional method of protecting structures from water damage. Gutters collect water from the roof and downspouts direct the flow to the ground away from the foundation. These systems can be designed as an integral part of a building.



*Downspouts should be located at interior or exterior corner. Downspouts in the middle of the facade should be avoided.*

**DO**



**AVOID**



**Key Points**

- Downspout locations should be carefully considered relative to the natural vertical components of the house. In general, downspouts should be located at interior or exterior corners.
- Ogee gutters deserve particular attention as they relate to eave returns at the gable end. See "Eaves"

The ogee gutter is shaped intentionally to emulate the crown molding at the eave. As such, the gutter becomes part of the profile of the eave. In cases where the ogee gutter is used, it should return with the eave and die into the face of the house, as shown to the left.

\*Where it is not possible for ogee gutters to be used correctly, half-round gutters on hanging brackets should be used instead.



*Ogee gutters should return with the eave or entablature as a portion of the trim and die into the face of the house.*

*Avoid ogee gutters that end abruptly or do not return with the eave. Gutter profiles should be treated as millwork.*

## Gutters & Flashing

GUTTERS AND DOWNSPOUTS CAN PROTECT A BUILDING.



*Quality materials, such as copper, can make gutters, downspouts and flashing into a decorative feature.*

Gutters, downspouts and flashing are often necessary for controlling water flow and preventing infiltration, rotting and erosion. These elements may be designed to integrate with the finishes or may be designed as a feature using decorative materials.

### DO



*Copper can turn flashing into a decorative feature.*

#### Key Points

- Gutters and downspouts should be made of galvanized steel copper (not copper-coated), lead-coated copper or aluminum.
- Include splash blocks of fieldstone, brick or gravel.
- Visible flashing should be copper, lead-coated copper or anodized aluminum. Exposed rubber membrane flashing is discouraged.
- Copper roofs, flashing, gutters and downspouts are recommended to be allowed to age naturally (not painted or sealed).



*Built-in gutters use the inside of the eaves to channel water flow.*



*A standard aluminum ogee gutter and downspout blend with the building by matching the paint color.*

### AVOID



*Plastic splash blocks feel like an after-thought rather than a design decision.*



*Extension hoses are unsightly additions and call attention to the poorly designed gutter system.*

## Residential Entry Doors

ENTRY DOORS SHOULD BE WELCOMING AND DURABLE



*The entry door is clear and welcoming.*

Entry doors make a first impression to a guest entering a home. The front door is traditionally the focal point of the front facade, so that it is obvious and welcoming. Since the entryway is approached, and perhaps even touched, the most detail and quality materials are incorporated for close inspection. A porch or canopy is common to provide shelter.

### DO



*Successful front entries welcome guests and visitors and can offer a place to include a splash of color.*

### Key Points

- Doors should be constructed of vertical stiles and horizontal rails with solid or glazed panels
- Wood entry doors are preferred over synthetic or metal
- Door style should be appropriate to the architectural style
- Use sidelights and transoms when appropriate
- Porches, porticoes and canopies are recommended to provide shelter

### AVOID

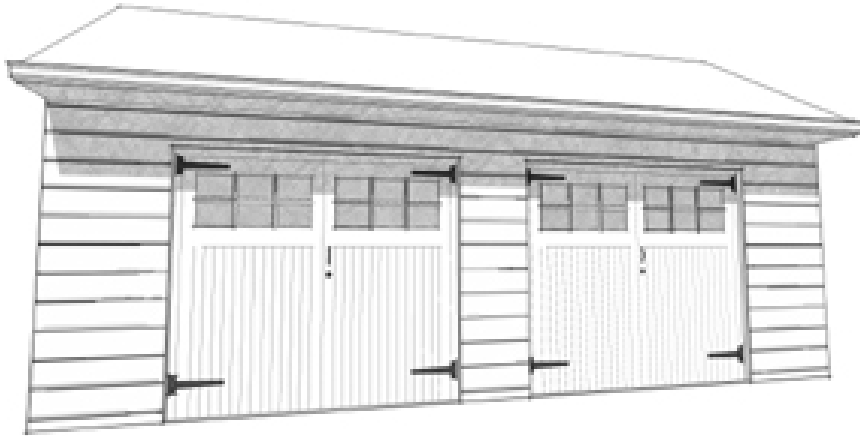


*Flush doors are a modern style using thin veneers.*



*Overly ornamental doors are incompatible in style.*

## Garage Doors



*Garage doors may resemble old barn doors.*

GARAGES ARE THE MODERN VERSION OF A TRADITIONAL BARN OR CARRIAGE HOUSE.

Garage doors have become common since only the middle of the 20th century. These entries for cars should take design cues from traditional barn and carriage house doors to integrate with the character of their surroundings. Garage doors require strict attention to prevent the garage from undermining the character of the places they inhabit.

### DO



*Garage doors deserve design attention - aim for vertical proportions among all components. Vertical proportions can be achieved by using two separate doors and including transom windows along the top bay of the door.*

### Key Points

- Wherever possible visually break a double bay garage door into two separate doors.
- Transom lites in the topmost bay of the door can be used effectively to increase the “verticality” of the composition.
- A small canopy or trellis can be used to create a shadow line over the doors and improve the scale of the elevation.
- Overhead doors should have hardware that indicates a traditional swing or sliding function.
- Garages should always be designed in harmony with the architectural style of the primary building or buildings. See “Garages and Outbuildings”.

### AVOID



*Avoid double-wide garage doors that do not have traditional proportions. These doors are oversized and out of scale with their surroundings.*

## Windows

WINDOWS ARE THE FUNCTIONAL “EYES” OF A BUILDING.

Traditional windows functioned to let in light and air while allowing views from the building. Windows were often small openings punched into a solid wall. Vertical proportions of the windows allowed larger glazed area with the economy of a short header or lintel.



*Windows are the “eyes” of a home.*

### DO



*Each window in this horizontal band is individually proportioned vertically as a unit and in its panes.*

*Shorter windows on the second floor are almost square in proportion. The vertical proportion and size of the panes matches that of a single sash of the double hung windows below for a harmonious elevation.*

### Key Points

- Windows and window panes should be generally vertical in proportion.
- Each window unit within the assembly of a gang or bay of windows should be vertically proportioned.
- Window sashes and frames should be made of wood (painted), fiberglass, painted aluminum or solid vinyl. Extruded vinyl is discouraged.
- Windows should be clear glazed. Exceptions include decorative stained glass, where appropriate. Low-e and energy efficient coatings are encouraged.

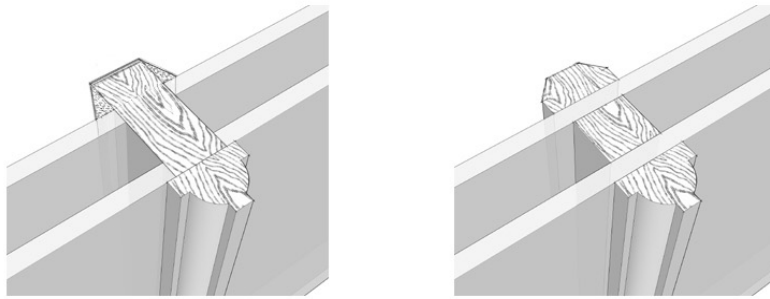
### AVOID



*Windows or individual panes proportioned horizontally are not found in traditional architecture.*

## Window Muntins

MUNTINS JOIN SMALL PANES OF GLASS INTO LARGER WINDOWS.



*Traditionally constructed windows have true muntins separating each window lite.*

*Simulated divided lites allow the energy efficiency of a modern window with the authenticity of traditional muntins.*

Historically, windows were constructed with small panes of glass joined by muntins. The size of glass was limited, and muntins allowed larger expanses of glass than could be readily produced in a single sheet. The muntins were both structural and decorative in supporting the panes and framing views within individual “lites”.

### DO

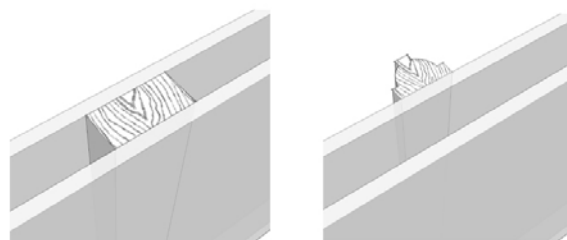


*Windows may achieve higher energy efficiency by using simulated divided lite (SDL) technology. This gives the effect of traditional divided lites while allowing an air-tight seal between double panes of glass.*

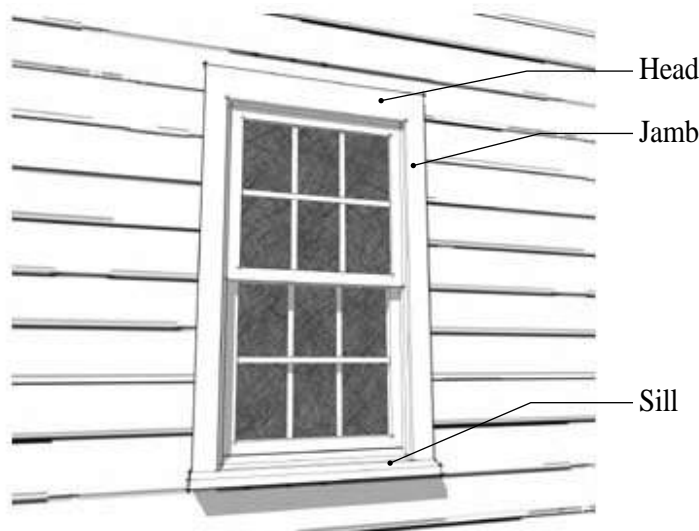
### Key Points

- True divided lite or SDL (Simulated Divided Lite) windows are encouraged. SDL windows have permanent exterior and interior muntins and an integral spacer bar.
- Muntins should be of the same material as the window frame.
- Muntins should have a moulded profile at least 7/8” in width.
- Muntins should divide each window sash into vertical panes.
- Typical muntin patterns include 6 over 6, 6 over 1, 2 over 2 and 2 over 1.
- Among windows of different sizes, the panes should be similar in size and proportion.

### AVOID



*Windows with removable muntins or muntins embedded within the double glazing lack the depth that true muntins create. These “grids” are merely decorative and do not give the appearance of a muntin’s purpose.*



*Casings, composed of a sill, jamb and head trim, frame traditional window and door openings.*

## Casings

**WOOD CASINGS FRAME TRADITIONAL WINDOW AND DOOR OPENINGS.**

Window and door openings are traditionally trimmed with wood casing to create a neat transition between the opening and wall. Casings project beyond the wood siding or are set within a masonry wall to fill voids between the unit and masonry opening. These applications derive from traditional construction methods and materials.

**DO**



*Traditional window casings are set into masonry openings.*



*Ganged windows appear as two units with structure and trim between.*



*Head casings may be elaborated with wider trim or a cap.*

**Key Points**

- Window trim should be comprised of jamb and head casings and a substantial sill.
- Head casings may be emphasized by thicker trim and/or additional cap trim.
- Ganged windows should have a vertical mull that is wide enough for its own casing - a min. of 2 1/2" wide. This expresses the windows as two distinct vertical units with structure between.

**AVOID**



*Tight-mulled windows have only a narrow vertical bar between units. This mull should be wide enough to separate two distinct window units.*



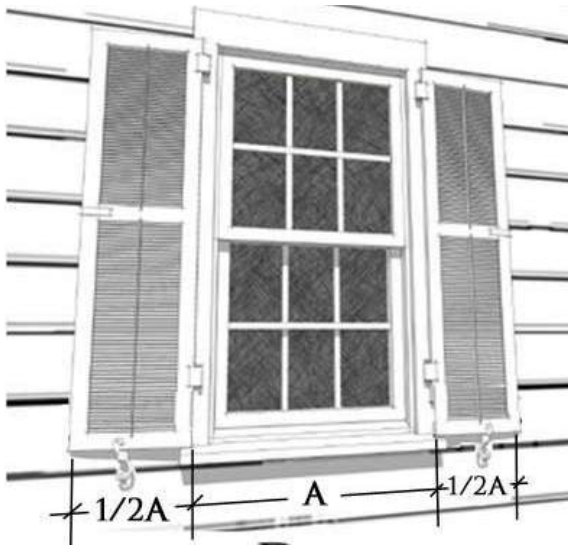
*Trim should not "picture frame" a window with equal sized trim on all four sides. Mitered corners are also not used in typical casings.*

- Casings are typically proud of wood siding to receive the ends of the siding.
- Casings are typically set within masonry walls to fill voids between the unit and masonry opening.

## Shutters

SHUTTERS CONTROL THE FLOW OF LIGHT AND AIR INTO A BUILDING.

Traditional shutters allow a building's occupants to control the passage of light, air, heat and water into or out of a building. Shutters were designed to be closed in a storm or opened to allow sunlight and breezes. Shutters can still be used today to reduce dependence on modern electrical, heating and air conditioning systems.



*Shutters should be sized to fit the window when closed.*

### DO



*Shutters may be fixed so long as they appear operable.*



*An operable shutter can be closed when the room is not in use.*



*A barn shutter is sized so that a single leaf would cover the opening.*

### AVOID



*Inappropriately sized or poorly located shutters would not cover the window if they could be closed.*

*Shutters screwed to the wall are obvious fakes and should be avoided.*

### Key Points

- Shutters should be sized to match the window height and half of the window width. Shutters that appear too large or small to cover the window opening when closed should be avoided.
- Shutters should be mounted in such a fashion that they appear able to be closed.
- Shutters may be of either paneled or louvered type.
- Shutters are recommended to be wood or a paintable synthetic material that gives the appearance of wood. Vinyl shutters are discouraged.
- Hinge and closure hardware is recommended to add authenticity to the shutters. Hardware should be wrought iron and appear to function, even if the shutter is secured in place.



## Front Porches

FRONT PORCHES AND PORTICOES ADD TO RESIDENTIAL STREET LIFE.

Front porches traditionally shelter the entry and create a transition between the public sidewalk and the private home. When located with small setbacks from the street, front porches enliven the street by creating a place to sit and watch passers-by. The form and location fosters conversation among neighbors.

### DO



*Traditional American street life is characterized by the lively interaction between neighbors on the front porch.*

### Key Points

- Great attention should be paid to the detailing and overall proportion of porches and porticoes relative to each neighborhood and building.
- Covered porches function best at a minimum depth of eight feet. Porches may be one or two stories tall with either flat, shed, gabled or hipped roofs.
- Front porches are traditionally arranged to address the most public face of the house and where called for, to address more than one public face.

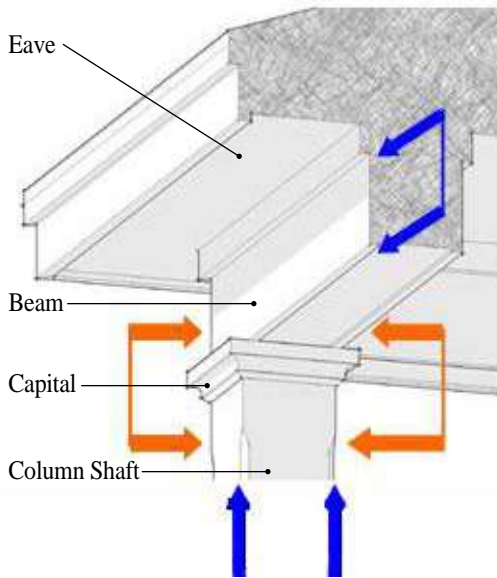
### AVOID



*Enclosing front porches in glass, screen or other material creates a private room that does not function as a traditional front porch. The enclosure does not allow conversation with passers-by and obscures the entry from visitors. Enclosed porches and conservatories are appropriate in the rear or side of a home.*



*Open decks are not appropriate for the front of a home. Informal decks or patios may be constructed at the rear or side of a home.*



*The faces of the column shaft should align with the vertical faces of the beam.*

## Columns & Beams

BEAMS ARE SIZED AND LOCATED IN RELATION TO THE COLUMNS BELOW.

Well-built porches can enrich the character of the house. The detailing on the columns and beams of the porch can express the style, structure and formality of the porch and the home.

### DO

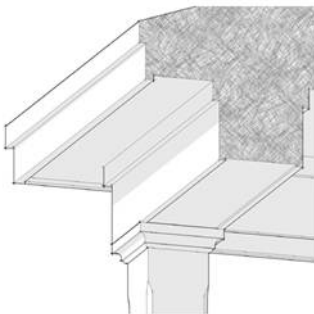


*Properly aligned assemblies appear to provide the correct support to the beam above.*

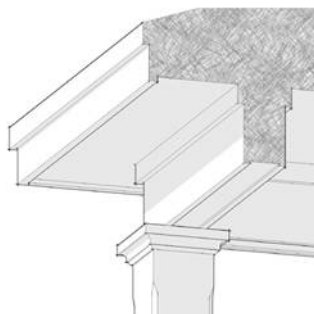
### Key Points

- Porch eaves and rakes usually extend past the face of the porch beam a minimum of 8" (exclusive of any gutters).
- Traditionally, the face of the finished porch beam should align with the neck of the supporting column on both the interior and exterior. Avoid instances where the porch column is narrower than the porch beam or vice versa. Porch beams are traditionally as deep as the supporting columns are wide.

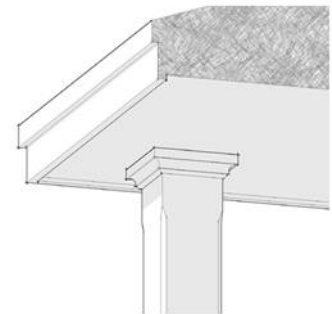
### AVOID



*Avoid column capitals that are as wide as the beam. Column capitals should extend beyond the face of the beam.*



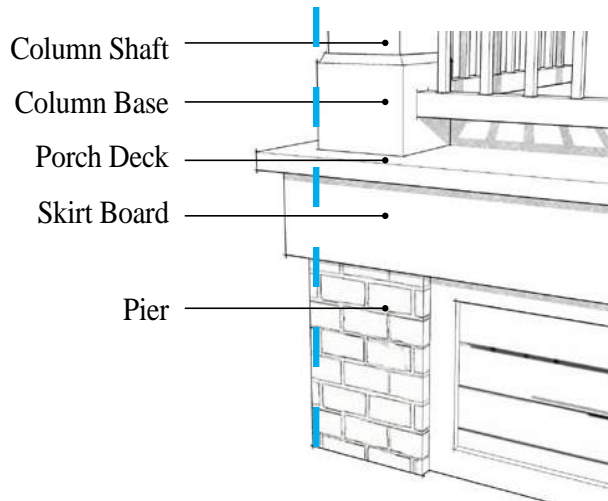
*Avoid constructing porches with columns that are wider than the beam, or are misaligned from the face of the beam.*



*Avoid details that eliminate the use of a beam altogether. Columns that support the ceiling directly appear ready to puncture the ceiling surface.*

## Column Bases

BEAMS ARE SIZED AND LOCATED IN RELATION TO THE COLUMNS BELOW.



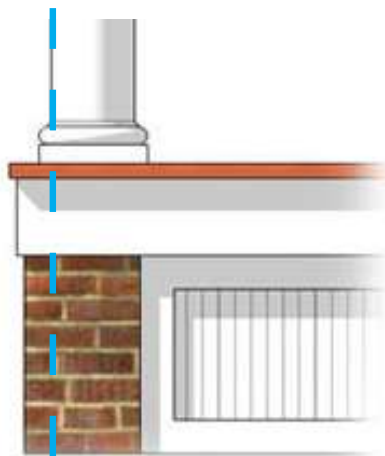
*Align the base of a column with the face of the supporting pier.*

Columns are structural elements used to support the beams and roof over a porch. To function as structural posts, columns must be firmly secured to a structural base or foundation that transmits the weight to the ground. Traditionally, the column base aligns with the face of the structural pier below.

### DO



*Align end columns to the corner of the pier and align intermediate columns to the center of the front face of the pier below.*

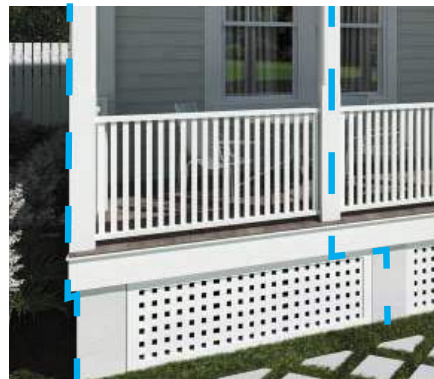
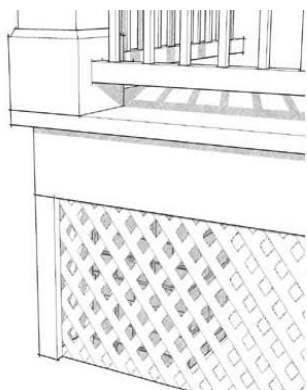


*Porch columns may be inset from the edge of the decking and masonry pier.*

### Key Points

- Porch columns should be a minimum of 6" square or 8" diameter with a clear representation of both capital and base.
- The face of the column base should align with the face of the pier below.
- End columns should align with both faces of the pier, while intermediate columns are centered above & aligned with the front of the pier.

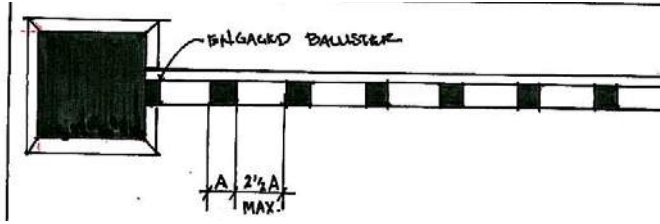
### AVOID



*Avoid locating the column so that the base is flush with the decking. The column in this arrangement appears to cantilever from the structural pier and it appears that the column may fall off the deck. Also avoid placing columns without or misaligned to a structural pier.*

## Railings

PORCH RAILINGS ADD SAFETY, COMFORT AND CHARACTER TO A PORCH.



Balusters are traditionally spaced 2.5 diameters apart. It is common for the railing to begin and terminate with an engaged baluster.

Railings are sometimes required for safety, but can also help to define the extents of the porch as a usable room. The design of a porch rail can enhance the enclosure and character of the porch.

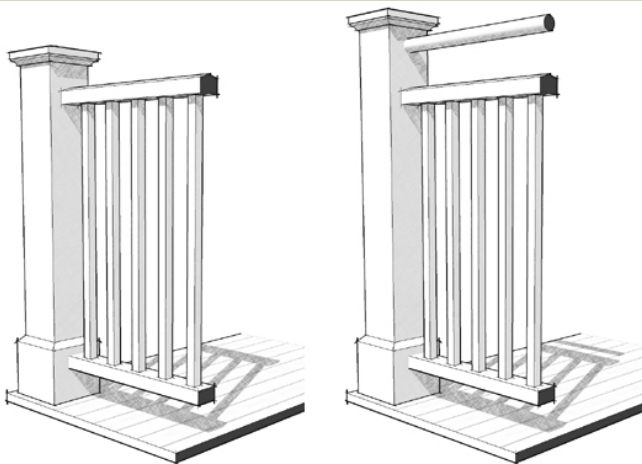
### Key Points

- Porch railings and balusters should be painted wood or fiberglass with square or turned balusters set between a top and bottom rail.
- Railings should be as low as practical to maintain a traditional proportion and allow views over the top rail when seated on a porch.
- If a railing is required by code to be greater than 36" tall, it should have a major rail set at 34" or less, with a less visible upper rail to meet code.



Porch rails define the boundaries of the porch and make the area near the porch edge usable. Low porch rails allow views over the top rail from a seated position.

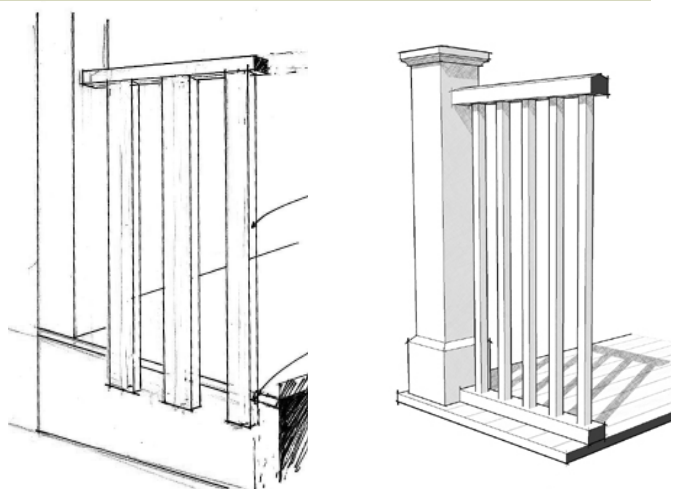
### DO



Traditional railing assemblies are constructed of balusters set between a top rail and a bottom rail.

When code requires, an additional pipe rail should be located at 36", but the major rail should be set at 34" or less.

### AVOID



Avoid railing assemblies that lack a bottom rail and are composed of framing stock nailed directly to the rim joist.

Avoid bottom rails that are set on the porch deck. The condition illustrated above will quickly rot.

# Trim

TRIM WORK CREATES NEAT TRANSITIONS BETWEEN TRADITIONAL MATERIALS.



*Trim is functional and adds character to a building.*

Traditionally, trim was used to make clean transitions between different planes, materials or around openings. Trim can solve many conditions by sitting proud as an edge for adjacent materials. Trim can range from simple, clean and functional to elaborate, ornate and expressive. Minimal dimensions reflect the traditional wood material.

## DO



*Trim is used at points of transition, such as between different materials at the foundation, roof and windows.*



*Casings are generally wider and more elaborate at the front entry to emphasize the door as a focal point.*

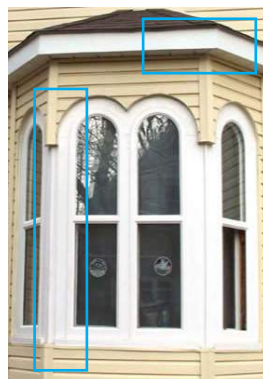
### Key Points

- Trim typically should not be less than 5 1/2" in width at corners and 3 1/2" in width around openings. These dimensions represent typical wood boards used in traditional trim work. Exceptions include shingle-style structures and buildings with classical detailing, where less trim may be appropriate.
- Trim is generally proud of the siding to frame openings and provide a surface into which the siding can end.
- Trim is recommended to be wood or a paintable synthetic material similar in appearance to wood.
- Trim should be stained or painted.
- Larger or more decorative trim is appropriate at the front entry for emphasis.

## AVOID



*Openings without trim do not offer a transition between the siding and window.*



*The absence of trim on this bay window leave it with poor transitions at the eave and corners. The recessed window casings do not provide a proud edge for the siding at the windows.*

## Additional Resources

*Get Your House Right: Architectural Elements to Use and Avoid.*  
Cusato, Marianne 2007 Sterling Publishing

*A Field Guide to American Houses.* McAlester, V. & L. 1984  
Random House

*Traditional Construction Patterns: Design and Detail Rules of Thumb.* Mouzon, Stephen A. 2004 McGraw-Hill Professional

*The Architectural Pattern Book.* Urban Design Associates  
Gindroz, R. and Robinson, R. 2004 W.W. Norton and Company

*The Language of Doors.* Vicente, P. and Connor, T. 2005  
Artisan